

WHAT IS CLAIMED IS:

1                   1.       An input device comprising:  
2                   a housing having:  
3                   a bottom case; and  
4                   an upper member disposed above the bottom case, the upper member  
5 including a palm rest configured to support a user's palm and at least one key plate extending  
6 continuously from the palm rest to form a hinge between the at least one key plate and the  
7 palm rest without a gap, the at least one key plate being movable in bending relative to the  
8 palm rest at the hinge to activate a key switch.

1                   2.       The input device of claim 1 wherein the hinge comprises a hinge recess  
2 which is smaller in thickness than the palm rest.

1                   3.       The input device of claim 2 wherein the hinge recess is smaller in  
2 thickness than the at least one key plate.

1                   4.       The input device of claim 3 wherein the hinge recess decreases in  
2 thickness gradually from the palm rest and from the at least one key plate, reaching a  
3 minimum thickness at an intermediate location between the palm rest and at least one key  
4 plate.

1                   5.       The input device of claim 2 wherein the at least one key plate  
2 comprises a left key plate and a right key plate extending forward from the palm rest, wherein  
3 the left hinge recess is angled forward and outward to the left from a central region of the  
4 upper member, and wherein the right hinge recess is angled forward and outward to the right  
5 from the central region of the upper member.

1                   6.       The input device of claim 1 wherein the at least one key plate  
2 comprises a left key plate and a right key plate which are spaced from one another by a  
3 spacing, and further comprising an island disposed in the spacing and connected between the  
4 left key plate and the right key plate.

1                   7.       The input device of claim 6 wherein the island includes at least one  
2 opening through which at least one user-manipulable object protrudes from an interior of the  
3 housing to be operable by a user's finger.

1                   8.       The input device of claim 7 wherein the at least one user-manipulable  
2 object comprises at least one of a button and a roller.

1                   9.       The input device of claim 1 wherein the upper member is coupled to a  
2 top case which is connected to the bottom case, the upper member including beveled edges to  
3 substantially conceal gaps between the upper member and the top case.

1                   10.      The input device of claim 1 wherein the bottom case includes an  
2 alignment groove configured to be aligned with an alignment protrusion of a recharging  
3 member.

1                   11.      An input device comprising:  
2                   a housing having:  
3                   a bottom case;  
4                   a top case connected to the bottom case, the top case including a left side grip  
5 and a right side grip being formed on a single piece component, the left side grip and the right  
6 side grip being configured to be held by a user's thumb on one side and by at least one of the  
7 user's ring finger and little finger on another side; and  
8                   an upper member connected to the top case and including a palm rest  
9 configured to support the user's palm.

1                   12.      The input device of claim 11 wherein the single piece component  
2 includes a front connected between the left side grip and the right side grip.

1                   13.      The input device of claim 11 wherein at least one of the left side grip  
2 and the right side grip has a concave surface.

1                   14.      The input device of claim 11 wherein a portion of the single piece  
2 component has a hollow interior.

1                   15.      The input device of claim 14 wherein the single piece component  
2 having the hollow interior is formed by gas assisted injection molding.

1                   16.      The input device of claim 11 wherein the single piece component has a  
2 thick portion which is thicker than a thin portion, and wherein the thin portion comprises a  
3 first material and wherein the thick portion comprises the first material and a second material.

1                   17.     The input device of claim 16 wherein the single piece component  
2     having the thick portion and the thin portion is formed by dual material injection molding.

1                   18.     An input device comprising:  
2                   a housing having:  
3                   a bottom case;  
4                   a top case connected to the bottom case, the top case including a left side grip  
5     and a right side grip, the left side grip and the right side grip being configured to be held by a  
6     user's thumb on one side and by at least one of the user's ring finger and little finger on  
7     another side; and  
8                   an upper member connected to the top case, the upper member including a  
9     palm rest configured to support the user's palm and at least one key plate connected to the  
10    palm rest by a hinge without a gap, the at least one key plate being movable in bending  
11    relative to the palm rest at the hinge.

1                   19.     The input device of claim 18 wherein the left side grip and the right  
2     side grip of the top case are formed on a single piece component.

1                   20.     The input device of claim 18 wherein the at least one key plate extends  
2     continuously from the palm rest to form the hinge between the at least one key plate and the  
3     palm rest without a gap.